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United States Patent [19]

Van Brunt et al.

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[54] OSCILLATORY CHEST COMPRESSION DEVICE

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[*] Notice: This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

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[52] U.S. Cl. 601/41; 601/44; 601/152

[58] Field of Search 601/41-44, 48, 601/55, 56, 77, 148-152; 128/DIG. 20, 602/13

[56] References Cited

U.S. PATENT DOCUMENTS

3,063,444 11/1962 Jobst .

3,536,063	10/1970	Werdeing .
3,896,794	7/1975	McGrath .
3,993,053	11/1976	Grossan .
4,133,305	1/1979	Steuer .
4,186,732	2/1980	Christoffel
4,815,452	3/1989	Hayek .
4,838,263	6/1989	Warwick et al. .
4,977,889	12/1990	Budd .
5,056,505	10/1991	Warwick et al. .
5,188,097	2/1993	Hansen
5,453,081	9/1995	Hansen .
5,606,754	3/1997	Hand et al. .

FOREIGN PATENT DOCUMENTS

0542383A2 5/1993 European Pat. Off. .

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[57] ABSTRACT

An oscillatory chest compression device includes an oscillatory air flow generator and a positive air flow generator. A first feedback system controls the oscillation rate of the oscillatory air flow generator, and a second feedback system controls the peak pressure created by the positive air flow generator.

12 Claims, 3 Drawing Sheets

